

=> d his

(FILE 'HOME' ENTERED AT 10:59:49 ON 09 MAY 2005)

FILE 'REGISTRY' ENTERED AT 11:13:41 ON 09 MAY 2005

L1 1 S 72542-49-5
E OXYSTEROL/CN
E OXYSTEROL

L2 193 S E3

FILE 'CAPLUS' ENTERED AT 11:18:14 ON 09 MAY 2005

L3 1116 S OXYSTEROL
L4 6 S L1 AND OXYSTEROL
L5 205 S (EPOXYCHOLESTEROL) OR OXIDOCHOLESTEROL
L6 55 S L5(L) OXYSTEROL
L7 78 S L5(3A) (24 OR 25)
L8 32 S OXYSTEROL#(L)L7
L9 14 S L8 NOT PY >=2000

FILE 'EPFULL, FRFULL, GBFULL, PATDPFULL, PCTFULL, RDISCLOSURE,
USPATFULL, USPAT2' ENTERED AT 11:40:26 ON 09 MAY 2005

E TULARIK/PA

L10 472 S E3-E11

L11 19 S L10 AND (OXYSTEROL OR OXIDOCHOLESTEROL OR EPOXYCHOLESTEROL O

=> s e3-e11

L10 472 (TULARIK/PA OR "TULARIK INC"/PA OR "TULARIK INC A DELAWARE CORP
RATION"/PA OR "TULARIK INC."/PA OR "TULARIK INCORPORATED"/PA OR
"TULARIK LIMITED"/PA OR "TULARIK LTD., LONDON, GB"/PA OR "TULARI
K, INC."/PA OR "TULARIK, INC., SOUTH SAN FRANCISCO, CALIF.,
US"/PA)

=> s 110 and (OXYSTEROL or OXIDOCHOLESTEROL or EPOXYCHOLESTEROL or t0314407 or t0901317)
L11 19 L10 AND (OXYSTEROL OR OXIDOCHOLESTEROL OR EPOXYCHOLESTEROL OR
T0314407 OR T0901317)

=> d ibib 1-19

L11 ANSWER 1 OF 19 PCTFULL COPYRIGHT 2005 Univentio on STN
ACCESSION NUMBER: 2003063796 PCTFULL ED 20030818 EW 200332
TITLE (ENGLISH): HETEROCYCLIC ARYLSULFONAMIDOBENZYLIC COMPOUNDS
TITLE (FRENCH): COMPOSES ARYLSULFONAMIDOBENZYLICIQUES HETEROCYCLIQUES
INVENTOR(S): JIAO, Xian, Yun, 1738 South Grant Street, Apt. 5, San
Mateo, CA 94402, US [CN, US];
KAYSER, Frank, 4150 17th Street, #25, San Francisco, CA
94114, US [DE, US];
KOPECKY, David, J., 788 Harrison Street, Apt. #507, San
Francisco, CA 94107, US [US, US];
PIPER, Derek, E., 1226 Church Street, #10, San
Francisco, CA 94114, US [US, US];
SHIAU, Andrew, K., 34 Hugo Street, Apt. 3, San
Francisco, CA 94122, US [US, US];
MCKENDRY, Sharon, 950 Redwood Shores Parkway, Apt.
A105, Redwood City, CA 94065-8482, US [GB, US]

PATENT ASSIGNEE(S): **TULARIK INC., Two Corporate Drive, South San
Francisco, CA 94080, US [US, US], for all designates
States except US;**
JIAO, Xian, Yun, 1738 South Grant Street, Apt. 5, San
Mateo, CA 94402, US [CN, US], for US only;
KAYSER, Frank, 4150 17th Street, #25, San Francisco, CA
94114, US [DE, US], for US only;
KOPECKY, David, J., 788 Harrison Street, Apt. #507, San
Francisco, CA 94107, US [US, US], for US only;
PIPER, Derek, E., 1226 Church Street, #10, San
Francisco, CA 94114, US [US, US], for US only;
SHIAU, Andrew, K., 34 Hugo Street, Apt. 3, San
Francisco, CA 94122, US [US, US], for US only;
MCKENDRY, Sharon, 950 Redwood Shores Parkway, Apt.
A105, Redwood City, CA 94065-8482, US [GB, US], for US
only

AGENT: KEZER, William, B.\$, Townsend and Townsend and Crew
LLP, Two Embarcadero Center, 8th Floor, San Francisco,
CA 94111\$, US

LANGUAGE OF FILING: English
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2003063796	A2	20030807

DESIGNATED STATES

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR
CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID
IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD
MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG
SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU
MC NL PT SE SI SK TR

RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2003-US3148 A 20030129
PRIORITY INFO.: 2002-60/353,496 20020130

L11 ANSWER 2 OF 19 PCTFULL COPYRIGHT 2005 Univentio on STN
 ACCESSION NUMBER: 2003063576 PCTFULL ED 20030818 EW 200332
 TITLE (ENGLISH): ARYLSULFONAMIDOBENZYLIC COMPOUNDS
 TITLE (FRENCH): COMPOSES ARYLSULFONAMIDOBENZYLIQUES
 INVENTOR(S): JIAO, Xian, Yun, 1738 South Grant Street, Apt. 5, San Mateo, CA 94402, US [CN, US];
 KAYSER, Frank, 4150 17th Street, #25, San Francisco, CA 94114, US [DE, US];
 KOPECKY, David, J., 788 Harrison Street, Apt. #507, San Francisco, CA 94107, US [US, US];
 MCKENDRY, Sharon, 231 30th Street, San Francisco, CA 94131, US [GB, US];
 PIPER, Derek, E., 1226 Church Street, #10, San Francisco, CA 94114, US [US, US];
 SHIAU, Andrew, K., 34 Hugo Street, Apt. 3, San Francisco, CA 94122, US [US, US]
 PATENT ASSIGNEE(S): TULARIK INC., Two Corporate Drive, South San Francisco, CA 94080, US [US, US], for all designates States except US;
 JIAO, Xian, Yun, 1738 South Grant Street, Apt. 5, San Mateo, CA 94402, US [CN, US], for US only;
 KAYSER, Frank, 4150 17th Street, #25, San Francisco, CA 94114, US [DE, US], for US only;
 KOPECKY, David, J., 788 Harrison Street, Apt. #507, San Francisco, CA 94107, US [US, US], for US only;
 MCKENDRY, Sharon, 231 30th Street, San Francisco, CA 94131, US [GB, US], for US only;
 PIPER, Derek, E., 1226 Church Street, #10, San Francisco, CA 94114, US [US, US], for US only;
 SHIAU, Andrew, K., 34 Hugo Street, Apt. 3, San Francisco, CA 94122, US [US, US], for US only
 AGENT: KEZER, William, B.\$, Townsend and Townsend and Crew LLP, Two Embarcadero Center, 8th Floor, San Francisco, CA 94111\$, US
 LANGUAGE OF FILING: English
 LANGUAGE OF PUBL.: English
 DOCUMENT TYPE: Patent
 PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2003063576	A2	20030807

DESIGNATED STATES
 W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR
 CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID
 IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD
 MG MK MN MW MX MZ NO NZ OM PH PL PT RO RU SC SD SE SG
 SK SL TJ TM TN TR TT TZ UA UG US UZ VC VN YU ZA ZM ZW
 RW (ARIPO): GH GM KE LS MW MZ SD SL SZ TZ UG ZM ZW
 RW (EAPO): AM AZ BY KG KZ MD RU TJ TM
 RW (EPO): AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LU
 MC NL PT SE SI SK TR
 RW (OAPI): BF BJ CF CG CI CM GA GN GQ GW ML MR NE SN TD TG
 APPLICATION INFO.: WO 2003-US3149 A 20030129
 PRIORITY INFO.: 2002-60/353,497 20020130
 US 2002-60/353,497 20020130

L11 ANSWER 3 OF 19 PCTFULL COPYRIGHT 2005 Univentio on STN
 ACCESSION NUMBER: 2001082917 PCTFULL ED 20020826
 TITLE (ENGLISH): TREATMENT OF HYPERTRIGLYCERIDEMIA AND OTHER CONDITIONS USING LXR MODULATORS
 TITLE (FRENCH): TRAITEMENT DE L'HYPERTRIGLYCERIDEMIE ET D'AUTRES MALADIES AU MOYEN DE MODULATEURS LXR
 INVENTOR(S): SHAN, Bei;
 SCHULTZ, Joshua;
 TU, Hua
 PATENT ASSIGNEE(S): TULARIK INC.;

SHAN, Bei;
SCHULTZ, Joshua;
TU, Hua
Patent

DOCUMENT TYPE:
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001082917	A2	20011108

DESIGNATED STATES

W:

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK
MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD
SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY
DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF
CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.:
PRIORITY INFO.:

WO 2001-US14586	A	20010503
2000-60/201,601		20000503
US 2000-60/201,601		20000503

L11 ANSWER 4 OF 19

PCTFULL COPYRIGHT 2005 Univentio on STN

ACCESSION NUMBER:

2001079272 PCTFULL ED 20020826

TITLE (ENGLISH):

SITOSTEROLEMIA SUSCEPTIBILITY GENE (SSG): COMPOSITIONS
AND METHODS OF USE

TITLE (FRENCH):

GENE DE SUSCEPTIBILITE A LA SITOSTEROLEMIE (SSG):
COMPOSITIONS ET METHODES D'UTILISATION

INVENTOR(S):

TIAN, Hui;
SCHULTZ, Joshua;
SHAN, Bei

PATENT ASSIGNEE(S):

TULARIK INC.;
TIAN, Hui;
SCHULTZ, Joshua;
SHAN, Bei

DOCUMENT TYPE:

Patent

PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001079272	A2	20011025

DESIGNATED STATES

W:

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK
MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD
SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY
DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF
CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.:

WO 2001-US12758	A	20010418
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PRIORITY INFO.:

2000-60/198,465		20000418
US 2000-60/198,465		20000418
US 2000-60/204,234		20000515
US 2000-60/204,234		20000515

L11 ANSWER 5 OF 19

PCTFULL COPYRIGHT 2005 Univentio on STN

ACCESSION NUMBER:

2001077067 PCTFULL ED 20020822

TITLE (ENGLISH):

SOLID PHASE SYNTHESIS OF LXR LIGANDS

TITLE (FRENCH):

SYNTHESE EN PHASE SOLIDE POUR LIGANDS LXR

INVENTOR(S):

MEDINA, Julio;
IMAZAKI, Naonori

PATENT ASSIGNEE(S):

TULARIK INC.;
SUMITOMO PHARMACEUTICALS;
MEDINA, Julio;
IMAZAKI, Naonori

DOCUMENT TYPE:

Patent

PATENT INFORMATION:

NUMBER	KIND	DATE
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WO 2001077067 A2 20011018

DESIGNATED STATES

W:

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK
MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD
SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY
DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF
CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.:

WO 2001-US11242 A 20010405

PRIORITY INFO.:

2000-60/194,911 20000405
US 2000-60/194,911 20000405
US 2001-09/827,837 20010404
US 2001-09/827,837 20010404

L11 ANSWER 6 OF 19

PCTFULL COPYRIGHT 2005 Univentio on STN

ACCESSION NUMBER:

2001060818 PCTFULL ED 20020822

TITLE (ENGLISH):

LXR MODULATORS

TITLE (FRENCH):

MODULATEURS LXR

INVENTOR(S):

LI, Leping;
MEDINA, Julio, Cesar;
SHAN, Bei

PATENT ASSIGNEE(S):

TULARIK INC.

DOCUMENT TYPE:

Patent

PATENT INFORMATION:

NUMBER KIND DATE

WO 2001060818 A1 20010823

DESIGNATED STATES

W:

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE
DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE
KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX
NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA
UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM
AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB
GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML
MR NE SN TD TG

APPLICATION INFO.:

WO 2000-US3806 A 20000214

L11 ANSWER 7 OF 19

PCTFULL COPYRIGHT 2005 Univentio on STN

ACCESSION NUMBER:

2001051045 PCTFULL ED 20020827

TITLE (ENGLISH):

MODULATORS OF THE CONSTITUTIVE ADROSTANE RECEPTOR
(CAR): SCREENING AND TREATMENT OF HYPERCHOLESTEROLEMIA

TITLE (FRENCH):

MODULATEURS DE CAR : CRIBLAGE ET TRAITEMENT DE
L'HYPERCHOLESTEROLEMIE

INVENTOR(S):

LEHMANN, Jurgan, M.;
SHIAU, Andrew, Kwan-Nan

PATENT ASSIGNEE(S):

TULARIK INC.;
LEHMANN, Jurgan, M.;
SHIAU, Andrew, Kwan-Nan

DOCUMENT TYPE:

Patent

PATENT INFORMATION:

NUMBER KIND DATE

WO 2001051045 A2 20010719

DESIGNATED STATES

W:

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU
CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK
MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD
SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY
DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR BF BJ CF
CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.:

WO 2001-US1111 A 20010112

PRIORITY INFO.:

2000-60/176,398 20000113
US 2000-60/176,398 20000113

L11 ANSWER 8 OF 19 PCTFULL COPYRIGHT 2005 Univentio on STN
 ACCESSION NUMBER: 2001003705 PCTFULL ED 20020828
 TITLE (ENGLISH): COMPOSITIONS AND METHODS FOR RAISING HDL CHOLESTEROL LEVELS
 TITLE (FRENCH): COMPOSITIONS ET METHODES PERMETTANT D'AUGMENTER LES TAUX DE HDL CHOLESTEROL
 INVENTOR(S): SHAN, Bei
 PATENT ASSIGNEE(S): TULARIK INC.; SHAN, Bei
 DOCUMENT TYPE: Patent
 PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2001003705	A1	20010118

DESIGNATED STATES

W:

AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CR CU
 CZ DE DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN
 IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK
 MN MW MX MZ NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM
 TR TT TZ UA UG US UZ VN YU ZA ZW GH GM KE LS MW MZ SD
 SL SZ TZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE CH CY
 DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ CF CG
 CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 2000-US18533 A 20000707
 PRIORITY INFO.: 1999-60/142,994 19990708
 US 1999-60/142,994 19990708
 US 2000-09/612,135 20000707
 US 2000-09/612,135 20000707

L11 ANSWER 9 OF 19 PCTFULL COPYRIGHT 2005 Univentio on STN
 ACCESSION NUMBER: 2000054759 PCTFULL ED 20020515
 TITLE (ENGLISH): LXR MODULATORS
 TITLE (FRENCH): MODULATEURS DU LXR
 INVENTOR(S): LI, Leping;
 MEDINA, Julio, C.;
 HASEGAWA, Hirohiko;
 CUTLER, Serena, T.;
 LIU, Jiwen;
 ZHU, Liusheng;
 SHAN, Bei;
 LUSTIG, Kevin

PATENT ASSIGNEE(S): TULARIK INC.
 LANGUAGE OF PUBL.: English
 DOCUMENT TYPE: Patent
 PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2000054759	A2	20000921

DESIGNATED STATES

W:

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE
 DK DM DZ EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP
 KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW
 MX NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ
 UA UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW
 AM AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR
 GB GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW
 ML MR NE SN TD TG

APPLICATION INFO.: WO 2000-US6611 A 20000315
 PRIORITY INFO.: 1999-60/124,525 19990315
 US 1999-60/124,525 19990315

L11 ANSWER 10 OF 19 PCTFULL COPYRIGHT 2005 Univentio on STN
 ACCESSION NUMBER: 2000040965 PCTFULL ED 20020515
 TITLE (ENGLISH): FXR RECEPTOR-MEDIATED MODULATION OF CHOLESTEROL METABOLISM
 TITLE (FRENCH): MODULATION DU METABOLISME DU CHOLESTEROL INDUITE PAR LE RECEPTEUR FXR

INVENTOR(S) : SHAN, Bei;
OKAMOTO, Arthur, Y.
PATENT ASSIGNEE(S) : TULARIK, INC.
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 2000040965	A1	20000713

DESIGNATED STATES
W:

AE AL AM AT AU AZ BA BB BG BR BY CA CH CN CR CU CZ DE
DK DM EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE
KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX
NO NZ PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA
UG UZ VN YU ZA ZW GH GM KE LS MW SD SL SZ TZ UG ZW AM
AZ BY KG KZ MD RU TJ TM AT BE CH CY DE DK ES FI FR GB
GR IE IT LU MC NL PT SE BF BJ CF CG CI CM GA GN GW ML
MR NE SN TD TG

APPLICATION INFO.: WO 2000-US431 A 20000106
PRIORITY INFO.: 1999-60/115,249 19990107
US 1999-60/115,249 19990107

L11 ANSWER 11 OF 19 PCTFULL COPYRIGHT 2005 Univentio on STN
ACCESSION NUMBER: 1999027365 PCTFULL ED 20020515
TITLE (ENGLISH): NUCLEAR HORMONE RECEPTOR DRUG SCREENS
TITLE (FRENCH): CRIBLES POUR MEDICAMENTS RECEPTEURS DE L'HORMONE
NUCLEAIRE

INVENTOR(S) : LUSTIG, Kevin;
BAEUERLE, Patrick;
BECKMANN, Holger;
CHEN, Jin-Long;
SHAN, Bei

PATENT ASSIGNEE(S) : TULARIK INC.
LANGUAGE OF PUBL.: English
DOCUMENT TYPE: Patent
PATENT INFORMATION:

NUMBER	KIND	DATE
WO 9927365	A1	19990603

DESIGNATED STATES
W:

AL AM AT AU AZ BA BB BG BR BY CA CH CN CU CZ DE DK EE
ES FI GB GE GH GM HR HU ID IL IS JP KE KG KP KR KZ LC
LK LR LS LT LU LV MD MG MK MN MW MX NO NZ PL PT RO RU
SD SE SG SI SK SL TJ TM TR TT UA UG UZ VN YU ZW GH GM
KE LS MW SD SZ UG ZW AM AZ BY KG KZ MD RU TJ TM AT BE
CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE BF BJ
CF CG CI CM GA GN GW ML MR NE SN TD TG

APPLICATION INFO.: WO 1998-US24969 A 19981120
PRIORITY INFO.: 1997-08/975,614 19971121
US 1997-08/975,614 19971121
US 1998-09/163,713 19980930
US 1998-09/163,713 19980930

L11 ANSWER 12 OF 19 USPATFULL on STN
ACCESSION NUMBER: 2004:196827 USPATFULL
TITLE: Solid phase synthesis of LXR ligands
INVENTOR(S) : Medina, Julio, San Carlos, CA, UNITED STATES
Imazaki, Naonori, Osaka, JAPAN
PATENT ASSIGNEE(S) : Tularik Inc., So. San Francisco, CA (U.S.
corporation)
Sumitomo Pharmaceuticals Co., Ltd., Osaka, JAPAN (U.S.
corporation)

NUMBER	KIND	DATE
US 2004152132	A1	20040805

PATENT INFORMATION: US 2003-749530 A1 20031230 (10)
APPLICATION INFO.:
RELATED APPLN. INFO.: Division of Ser. No. US 2001-827837, filed on 4 Apr

	NUMBER	DATE

PRIORITY INFORMATION:	US 2000-194911P	20000405 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834	
NUMBER OF CLAIMS:	22	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	3 Drawing Page(s)	
LINE COUNT:	1136	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L11 ANSWER 13 OF 19 USPATFULL on STN
 ACCESSION NUMBER: 2003:325111 USPATFULL
 TITLE: Arylsulfonamidobenzyllic compounds
 INVENTOR(S): Jiao, Xian Yun, San Mateo, CA, UNITED STATES
 Kayser, Frank, San Francisco, CA, UNITED STATES
 McKendry, Sharon, Redwood Shores, CA, UNITED STATES
 Piper, Derek E., Foster City, CA, UNITED STATES
 Shiau, Andrew K., San Francisco, CA, UNITED STATES
 PATENT ASSIGNEE(S): **Tularik Inc.**, So. San Francisco, CA (U.S. corporation)

	NUMBER	KIND	DATE

PATENT INFORMATION:	US 2003229093	A1	20031211
APPLICATION INFO.:	US 2003-354922	A1	20030129 (10)

	NUMBER	DATE

PRIORITY INFORMATION:	US 2002-353497P	20020130 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834	
NUMBER OF CLAIMS:	36	
EXEMPLARY CLAIM:	1	
LINE COUNT:	3129	
CAS INDEXING IS AVAILABLE FOR THIS PATENT.		

L11 ANSWER 14 OF 19 USPATFULL on STN
 ACCESSION NUMBER: 2003:312734 USPATFULL
 TITLE: Heterocyclic arylsulfonamidobenzyllic compounds
 INVENTOR(S): Jiao, Xian Yun, San Mateo, CA, UNITED STATES
 Kayser, Frank, San Francisco, CA, UNITED STATES
 Kopecky, David J., San Francisco, CA, UNITED STATES
 McKendry, Sharon, Redwood Shores, CA, UNITED STATES
 Piper, Derek E., Foster City, CA, UNITED STATES
 Shiau, Andrew K., San Francisco, CA, UNITED STATES
 PATENT ASSIGNEE(S): **Tularik Inc.**, So. San Francisco, CA (U.S. corporation)

	NUMBER	KIND	DATE

PATENT INFORMATION:	US 2003220339	A1	20031127
APPLICATION INFO.:	US 2003-354923	A1	20030129 (10)

	NUMBER	DATE

PRIORITY INFORMATION:	US 2002-353496P	20020130 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834	
NUMBER OF CLAIMS:	36	



EXEMPLARY CLAIM: 1
LINE COUNT: 1971
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 15 OF 19 USPATFULL on STN
ACCESSION NUMBER: 2003:115720 USPATFULL
TITLE: Nuclear hormone receptor fluorescence polarization assay
INVENTOR(S): Lustig, Kevin, South San Francisco, CA, United States
Baeuerle, Patrick, South San Francisco, CA, United States
Beckmann, Holger, South San Francisco, CA, United States
Chen, Jin-Long, South San Francisco, CA, United States
Shan, Bei, South San Francisco, CA, United States
PATENT ASSIGNEE(S): **Tularik Inc.**, South San Francisco, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6555326	B1	20030429
APPLICATION INFO.:	US 1997-975614		19971121 (8)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Pak, Michael		
LEGAL REPRESENTATIVE:	Osman, Richard Aton		
NUMBER OF CLAIMS:	18		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	4 Drawing Figure(s); 4 Drawing Page(s)		
LINE COUNT:	454		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 16 OF 19 USPATFULL on STN
ACCESSION NUMBER: 2003:3485 USPATFULL
TITLE: FXR receptor-mediated modulation of cholesterol metabolism
INVENTOR(S): Shan, Bei, Redwood City, CA, UNITED STATES
Okamoto, Arthur Y., San Mateo, CA, UNITED STATES
PATENT ASSIGNEE(S): **Tularik Inc., a Delaware Corporation** (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2003003520	A1	20030102
APPLICATION INFO.:	US 2002-217293	A1	20020812 (10)
RELATED APPLN. INFO.:	Continuation of Ser. No. US 2000-478948, filed on 6 Jan 2000, GRANTED, Pat. No. US 6465258		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-115249P	19990107 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	APPLICATION	
LEGAL REPRESENTATIVE:	TOWNSEND AND TOWNSEND AND CREW, LLP, TWO EMBARCADERO CENTER, EIGHTH FLOOR, SAN FRANCISCO, CA, 94111-3834	
NUMBER OF CLAIMS:	47	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	14 Drawing Page(s)	
LINE COUNT:	1817	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 17 OF 19 USPATFULL on STN
ACCESSION NUMBER: 2002:268615 USPATFULL
TITLE: FXR receptor-mediated modulation cholesterol metabolism
INVENTOR(S): Shan, Bei, Redwood City, CA, United States
Okamoto, Arthur Y, San Mateo, CA, United States
PATENT ASSIGNEE(S): **Tularik, Inc.**, South San Francisco, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6465258	B1	20021015
APPLICATION INFO.:	US 2000-478948		20000106 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1999-115249P	19990107 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Whisenant, Ethan C.	
LEGAL REPRESENTATIVE:	Townsend and Townsend and Crew LLP	
NUMBER OF CLAIMS:	47	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	14 Drawing Figure(s); 14 Drawing Page(s)	
LINE COUNT:	1921	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 18 OF 19 USPATFULL on STN

ACCESSION NUMBER: 2001:202683 USPATFULL

TITLE: LXR modulators

INVENTOR(S): Li, Leping, Burlingame, CA, United States
 Medina, Julio C., San Carlos, CA, United States
 Lustig, Kevin, South San Francisco, CA, United States
 Shan, Bei, Redwood City, CA, United States
 Hasegawa, Hirohiko, Osaka, Japan
 Cutler, Serena T., Palo Alto, CA, United States
 Liu, Jiwen, Burlingame, CA, United States
 Zhu, Liusheng, Burlingame, CA, United States

PATENT ASSIGNEE(S): **Tularik Inc.**, So. San Francisco, CA, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6316503	B1	20011113
APPLICATION INFO.:	US 2000-525861		20000314 (9)
DOCUMENT TYPE:	Utility		
FILE SEGMENT:	GRANTED		
PRIMARY EXAMINER:	Lambkin, Deborah C.		
LEGAL REPRESENTATIVE:	Townsend and Townsend and Crew LLP		
NUMBER OF CLAIMS:	47		
EXEMPLARY CLAIM:	1		
NUMBER OF DRAWINGS:	2 Drawing Figure(s); 2 Drawing Page(s)		
LINE COUNT:	2631		

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L11 ANSWER 19 OF 19 USPAT2 on STN

ACCESSION NUMBER: 2002:141091 USPAT2

TITLE: Solid phase synthesis of LXR ligands

INVENTOR(S): Medina, Julio, San Carlos, CA, United States
 Imazaki, Naonori, Osaka, JAPAN

PATENT ASSIGNEE(S): **Tularik, Inc.**, So. San Francisco, CA, United States (U.S. corporation)
 Sumitomo Pharmaceuticals Co., Ltd., Osaka, JAPAN (non-U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6673543	B2	20040106
APPLICATION INFO.:	US 2001-827837		20010404 (9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2000-194911P	20000405 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Celsa, Bennett	

ASSISTANT EXAMINER: Epperson, Jon D.
LEGAL REPRESENTATIVE: Townsend and Townsend and Crew LLP
NUMBER OF CLAIMS: 7
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 3 Drawing Figure(s); 3 Drawing Page(s)
LINE COUNT: 1009
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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(FILE 'HOME' ENTERED AT 14:20:43 ON 09 MAY 2005)

FILE 'CAPLUS' ENTERED AT 14:20:48 ON 09 MAY 2005

L1 1 S WO9910320/PN
L2 0 S L1 AND (OXYSTEROL OR (EPOXYCHOLESTEROL) OR OXIDOCHOLESTEROL)

FILE 'REGISTRY' ENTERED AT 14:32:53 ON 09 MAY 2005

E T0314407/CN
E T 314407/CN
E T 0314407/CN
L3 1 S E3

FILE 'CAPLUS' ENTERED AT 14:33:54 ON 09 MAY 2005

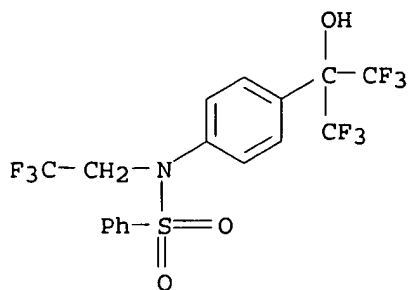
L4 4 S L3 OR T(W)0314407 OR T0314407

FILE 'REGISTRY' ENTERED AT 14:36:12 ON 09 MAY 2005

E T 0901317/CN
L5 1 S E3

FILE 'CAPLUS' ENTERED AT 14:36:54 ON 09 MAY 2005

L6 85 S L5 OR T(W)0901317 OR T0901317
L7 17 S L6(L) (HYPERCHOLESTER? OR HYPERLIP? OR ATHEROSCLERO? OR DIABET
L8 4 S L6 NOT PY>=2002



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

CN Benzenesulfonamide, N-(2,2,2-trifluoroethyl)-N-[4-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]phenyl]- (9CI) (CA INDEX NAME)

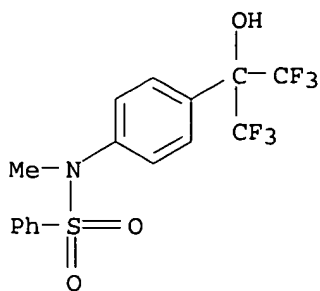
OTHER NAMES:

CN T 0901317

CN TO 901317

str cn

ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
RN 293753-06-7 REGISTRY



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

CN Benzenesulfonamide, N-methyl-N-[4-[2,2,2-trifluoro-1-hydroxy-1-(trifluoromethyl)ethyl]phenyl]- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN T 0314407

ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2002:574920 CAPLUS
DOCUMENT NUMBER: 137:140337
TITLE: Preparation of hydroxyhexafluoropropylarenes as malonyl-CoA decarboxylase inhibitors.
INVENTOR(S): Arrhenius, Thomas; Chen, Mi; Cheng, Jie Fei; Haramura, Masayuki; Huang, Yujin; Nadzan, Alex; Tith, Sovouthy; Wallace, David; Zhang, Lin; Brown, Steve; Harmon, Charles
PATENT ASSIGNEE(S): Chugai Seiyaku Kabushiki Kaisha, Japan
SOURCE: PCT Int. Appl., 63 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 3
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2002058690	A2	20020801	WO 2002-US1814	20020122
WO 2002058690	A3	20030424		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
EP 1353662	A2	20031022	EP 2002-703196	20020122
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004521113	T2	20040715	JP 2002-559024	20020122
US 2004087627	A1	20040506	US 2003-466856	20030721
PRIORITY APPLN. INFO.:				
			US 2001-264552P	P 20010126
			US 2001-265380P	P 20010126
			WO 2002-US1814	W 20020122
OTHER SOURCE(S): CASREACT 137:140337; MARPAT 137:140337				

L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN

ACCESSION NUMBER: 2001:816445 CAPLUS
DOCUMENT NUMBER: 135:352751
TITLE: Treatment of hypertriglyceridemia and other conditions using nuclear receptor LXR modulators
INVENTOR(S): Shan, Bei; Schultz, Joshua; Tu, Hua
PATENT ASSIGNEE(S): Tularik Inc., USA
SOURCE: PCT Int. Appl., 60 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001082917	A2	20011108	WO 2001-US14586	20010503
WO 2001082917	A3	20020606		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,				

BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG
 US 2002048572 A1 20020425 US 2001-848990 20010503
 PRIORITY APPLN. INFO.: US 2000-201601P P 20000503

L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2000:863226 CAPLUS
 DOCUMENT NUMBER: 135:41708
 TITLE: Role of LXRs in control of lipogenesis
 AUTHOR(S): Schultz, Joshua R.; Tu, Hua; Luk, Alvin; Repa, Joyce
 J.; Medina, Julio C.; Li, Leping; Schwendner, Susan;
 Wang, Shelley; Thoolen, Martin; Mangelsdorf, David J.;
 Lustig, Kevin D.; Shan, Bei
 CORPORATE SOURCE: Tularik Inc., South San Francisco, CA, 94080, USA
 SOURCE: Genes & Development (2000), 14(22), 2831-2838
 CODEN: GEDEEP; ISSN: 0890-9369
 PUBLISHER: Cold Spring Harbor Laboratory Press
 DOCUMENT TYPE: Journal
 LANGUAGE: English
 REFERENCE COUNT: 35 THERE ARE 35 CITED REFERENCES AVAILABLE FOR THIS
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
 ACCESSION NUMBER: 2000:666587 CAPLUS
 DOCUMENT NUMBER: 133:237693
 TITLE: Preparation of bis(trifluoromethyl)hydroxymethylbenzen
 esulfonamides, -ureas, and -carbamates as liver X
 receptor modulators.
 INVENTOR(S): Li, Leping; Medina, Julio C.; Hasegawa, Hirohiko;
 Cutler, Serena T.; Liu, Jiwen; Zhu, Liusheng; Shan,
 Bei; Lustig, Kevin
 PATENT ASSIGNEE(S): Tularik Inc., USA
 SOURCE: PCT Int. Appl., 113 pp.
 CODEN: PIXXD2
 DOCUMENT TYPE: Patent
 LANGUAGE: English
 FAMILY ACC. NUM. COUNT: 1
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000054759	A2	20000921	WO 2000-US6611	20000315
WO 2000054759	A3	20010215		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6316503	B1	20011113	US 2000-525861	20000314
CA 2367595	AA	20000921	CA 2000-2367595	20000315
EP 1161233	A2	20011212	EP 2000-914958	20000315
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002539155	T2	20021119	JP 2000-604835	20000315
PRIORITY APPLN. INFO.:			US 1999-124525P	P 19990315
			WO 2000-US6611	W 20000315
OTHER SOURCE(S):		MARPAT 133:237693		

=> d ibib 1-4

L8 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:642687 CAPLUS
DOCUMENT NUMBER: 135:366556
TITLE: Hypolipidemic effects of selective liver X receptor
alpha agonists
AUTHOR(S): Song, Ching; Liao, Shutsung
CORPORATE SOURCE: Department of Biochemistry and Molecular Biology, the
Tang Center for Herbal Medicine Research, The Ben May
Institute for Cancer Research, Chicago, IL, 60637, USA
SOURCE: Steroids (2001), 66(9), 673-681
CODEN: STEDAM; ISSN: 0039-128X
PUBLISHER: Elsevier Science Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 50 THERE ARE 50 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:202081 CAPLUS
TITLE: Discovery and optimization of activators of the
nuclear receptor LXR
AUTHOR(S): Medina, Julio C.; Li, Leping; Cutler, Serena;
Hasegawa, Hirohiko; Liu, Jiwen; Zhu, Liusheng;
Schultz, Joshua R.; Shan, Bei
CORPORATE SOURCE: Department of Chemistry, Tularik Inc, South San
Francisco, CA, 94080, USA
SOURCE: Abstracts of Papers, 221st ACS National Meeting, San
Diego, CA, United States, April 1-5, 2001 (2001)
MEDI-180
CODEN: 69FZD4
PUBLISHER: American Chemical Society
DOCUMENT TYPE: Journal; Meeting Abstract
LANGUAGE: English

L8 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2001:141061 CAPLUS
DOCUMENT NUMBER: 134:293193
TITLE: Expression of sterol regulatory element-binding
protein 1c (SREBP-1c) mRNA in rat hepatoma cells
requires endogenous LXR ligands
AUTHOR(S): DeBose-Boyd, Russell A.; Ou, Jiafu; Goldstein, Joseph
L.; Brown, Michael S.
CORPORATE SOURCE: Department of Molecular Genetics, University of Texas
Southwestern Medical Center, Dallas, TX, 75390-9046,
USA
SOURCE: Proceedings of the National Academy of Sciences of the
United States of America (2001), 98(4), 1477-1482
CODEN: PNASA6; ISSN: 0027-8424
PUBLISHER: National Academy of Sciences
DOCUMENT TYPE: Journal
LANGUAGE: English
REFERENCE COUNT: 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2000:863226 CAPLUS
DOCUMENT NUMBER: 135:41708
TITLE: Role of LXRs in control of lipogenesis
AUTHOR(S): Schultz, Joshua R.; Tu, Hua; Luk, Alvin; Repa, Joyce
J.; Medina, Julio C.; Li, Leping; Schwendner, Susan;
Wang, Shelley; Thoolen, Martin; Mangelsdorf, David J.;
Lustig, Kevin D.; Shan, Bei
CORPORATE SOURCE: Tularik Inc., South San Francisco, CA, 94080, USA
SOURCE: Genes & Development (2000), 14(22), 2831-2838
CODEN: GEDEEP; ISSN: 0890-9369
PUBLISHER: Cold Spring Harbor Laboratory Press

L3 ANSWER 8 OF 1116 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:277969 CAPLUS
TITLE: Oxidation of steroidal alkenes: Syntheses of
oxysterols
AUTHOR(S): Qiu, Zhihai
CORPORATE SOURCE: Auburn Univ., Auburn, AL, USA
SOURCE: (2004) 130 pp. Avail.: UMI, Order No. DA3124290
From: Diss. Abstr. Int., B 2004, 65(2), 746
DOCUMENT TYPE: Dissertation
LANGUAGE: English
TI Oxidation of steroidal alkenes: Syntheses of **oxysterols**

L3 ANSWER 9 OF 1116 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:272371 CAPLUS
TITLE: Novel Routes for Metabolism of 7-Ketocholesterol
AUTHOR(S): Jessup, Wendy; Brown, Andrew J.
CORPORATE SOURCE: Centre for Vascular Research at School of Medical
Sciences, University of New South Wales, Sydney,
Australia and Department of Haematology, Prince of
Wales Hospital, Sydney, Australia
SOURCE: Rejuvenation Research (2005), 8(1), 9-12
CODEN: RREEC2; ISSN: 1549-1684
PUBLISHER: Mary Ann Liebert, Inc.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB **Oxysterols** (oxygenated forms of cholesterol) are present at low levels in the circulation and accumulate in plasma and tissues in some pathologies. In atherosclerotic lesions, 7-oxygenated **oxysterols**, predominantly 7-ketocholesterol, accumulate and have been implicated in the pathol. of the disease. Therefore, knowledge of the mechanisms for 7-ketocholesterol generation and metabolism may provide therapeutic drug targets. There is some in vivo and in vitro evidence that sterol 27-hydroxylase acts on 7-ketocholesterol to initiate its degradation to more polar, water-soluble products. Recent studies indicate an alternative mechanism, in which 7-ketocholesterol is reduced to 7 β -hydroxycholesterol by 11 β -hydroxysteroid dehydrogenase type 1.

ACCESSION NUMBER: 1996:127600 CAPLUS
DOCUMENT NUMBER: 124:199411
TITLE: Oxysterols present in atherosclerotic tissue decrease the expression of lipoprotein lipase messenger RNA in human monocyte-derived macrophages
AUTHOR(S): Hulten, Lilemor Mattsson; Lindmark, Helena; Diczfalusy, Ulf; Bjoerkhem, Ingemar; Ottosson, Malin; Liu, Yani; Bondjers, Goeran; Wiklund, Olov
CORPORATE SOURCE: Wallenberg Laboratory for Cardiovascular Research, University of Goeteborg, Goeteborg, S-413 45, Swed.
SOURCE: Journal of Clinical Investigation (1996), 97(2), 461-8
CODEN: JCINAO; ISSN: 0021-9738
PUBLISHER: Rockefeller University Press
DOCUMENT TYPE: Journal
LANGUAGE: English

AB The presence of oxysterols in macrophages isolated from atherosclerotic tissue and the effect of oxysterols on the regulation of lipoprotein lipase (LPL) mRNA were studied. Both rabbit and human macrophages, freshly isolated from atherosclerotic aorta, show about the same distribution of oxysterols, analyzed by isotope dilution mass spectrometry, except that all three preps. of human arterial-derived macrophages contained high levels of 27-hydroxycholesterol, which was not found in rabbit macrophages. To determine if oxysterols regulate LPL expression, human monocyte-derived macrophages were incubated with different oxysterols. Incubation with 7 β -hydroxycholesterol and 25-hydroxycholesterol resulted in a 70-75% reduction of LPL mRNA, analyzed by quant. RT-PCR. Cholesterol and other tested oxysterols showed no effect on macrophage LPL mRNA expression compared with control. LPL activity in the medium was also reduced after exposure of the macrophages to 7 β -hydroxycholesterol and 25-hydroxycholesterol. In conclusion, the authors have demonstrated accumulation of oxysterols in macrophage-derived foam cells isolated from atherosclerotic aorta. There was suppression of LPL mRNA in human monocyte-derived macrophages after incubation with 7 β -hydroxycholesterol and 25-hydroxycholesterol. It is tempting to suggest that an exposure to oxysterols may explain the earlier observation of a low level of LPL mRNA in arterial foam cells.

IT 57-88-5, Cholesterol, biological studies 566-26-7, 7 α -Hydroxycholesterol 566-28-9, 7-Ketocholesterol 1250-95-9, 5 α ,6 α - **Epoxycholesterol** 1253-84-5, Cholestane-3 β ,5 α ,6 β -triol 4025-59-6, 5 β ,6 β -**Epoxycholesterol** 30271-38-6, 24-Hydroxycholesterol
RL: BAC (Biological activity or effector, except adverse); BOC (Biological occurrence); BSU (Biological study, unclassified); BIOL (Biological study); OCCU (Occurrence)

(**oxysterol** accumulation in rabbit and human macrophage-derived foam cells and effect of **oxysterols** on lipoprotein lipase mRNA expression in human monocyte-derived macrophages)

ACCESSION NUMBER: 1994:548787 CAPLUS
DOCUMENT NUMBER: 121:148787
TITLE: Effects of a 2,3-oxidosqualene-lanosterol cyclase inhibitor, 2,3:22,23-dioxidosqualene and 24,25-epoxycholesterol on the regulation of cholesterol biosynthesis in human hepatoma cell line HepG2
AUTHOR(S): Dollis, Daniele; Schuber, Francis
CORPORATE SOURCE: Laboratoire Chimie Bioorganique, Faculte Pharmacie, Illkirch, 67400, Fr.
SOURCE: Biochemical Pharmacology (1994), 48(1), 49-57
CODEN: BCPCA6; ISSN: 0006-2952
DOCUMENT TYPE: Journal
LANGUAGE: English

AB N-[1(1,5,9)-trimethyldecyl]-4 α , 10-dimethyl-8-aza-trans-decal-3 β -ol (8-azadecalin 1), a high-energy intermediate analog for the 2,3-oxidosqualene-lanosterol cyclase, was found to be a powerful (IC₅₀ \approx 0.1 μ M) inhibitor of cholesterol biosynthesis in human hepatoma HepG2 cells. In anal. with other mammalian cells grown in the presence of cyclase inhibitors, the decrease in C27-sterol formation was accompanied by an accumulation of 2,3-oxidosqualene, 2,3:22,23-dioxidosqualene, and by the formation of a compound characterized as 24,25-epoxycholesterol, a repressor of HMG-CoA (3-hydroxy-3-methylglutaryl CoA) reductase activity. In order to assess the cyclase as a potential pharmacol. target for the design of hypocholesterolemic drugs, it is important to test whether inhibitors of this enzyme are able to act synergistically on the biosynthesis of cholesterol, i.e. by decreasing the amount of lanosterol formed and by repressing the regulatory HMG-CoA reductase via the formation of regulatory oxysterols. The accumulation of 24,25-epoxycholesterol in relationship to the decrease of C27-sterol biosynthesis and of HMG-CoA reductase activity showed only a partial correlation: e.g. at [1] = 100 + IC₅₀ only a 50% reduction in enzyme activity could be attained. In contrast, when HepG2 cells were treated with 2,3:22,23-dioxidosqualene or 24,25-epoxycholesterol, excellent correlations were found between the inhibition of C27-sterol biosynthesis and the repression of HMG-CoA reductase activity, which was almost complete at the highest concns. of these epoxides (10⁻⁵ M). Altogether, the authors' results suggest that treatment of HepG2 cells with a cyclase inhibitor such as 8-azadecalin (1) does not lead to an intracellular accumulation of repressor mols. high enough to fully trigger a regulatory pathway resulting in a complete down-regulation of HMG-CoA reductase. At intermediary concns. of cyclase inhibitors (IC₅₀), however, a synergistic mode of action of these inhibitors seems plausible.

IT 31063-19-1, 2,3:22,23-Dioxidosqualene 72542-49-5,
24,25-Epoxycholesterol 104905-12-6
RL: BIOL (Biological stu

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L3 ANSWER 10 OF 1116 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 2005:255894 CAPLUS
TITLE: Epoxidation and reduction of cholesterol,
1,4,6-cholestatrien-3-one and 4,6-cholestadien-3 β -
ol
AUTHOR(S): Ma, Eunsook; Kim, Haksoon; Kim, Eunjeong
CORPORATE SOURCE: College of Pharmacy, Catholic University of Daegu, 330
Geumrak 1-ri, Hayang-eup, Gyongsan-si Gyongbook,
712-702, S. Korea
SOURCE: Steroids (2005), 70(4), 245-250
CODEN: STEDAM; ISSN: 0039-128X
PUBLISHER: Elsevier B.V.
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Many naturally occurring polyhydroxylated sterols and **oxysterols** exhibit potent biol. activities. This paper describes reagent and position selectivity of epoxidn. and reduction of cholesterol derivs. Cholesterol was reacted with m-chloroperoxybenzoic acid (m-CPBA) to form 5 α ,6 α -epoxycholestan-3 β -ol, but in reaction with 30% H₂O₂, it did not react. 1,4,6-Cholestatrien-3-one was obtained from cholesterol and 2,3-dichloro-5,6-dicyano-1,4-benzoquinone in dioxane. 1,4,6-Cholestatrien-3-one was reacted with 30% H₂O₂ and 5% NaOH in methanol to give 1 α ,2 α -epoxy-4,6-cholestadien-3-one, which was stereoselectively reduced with NaBH₄ to form 1 α ,2 α -epoxy-4,6-cholestadien-3 β -ol and reduced with Li metal in absolute ethanol to give 2-ethoxy-1,4,6-cholestatrien-3-one. And 1,4,6-cholestatrien-3-one was epoxidized with m-CPBA in dichloromethane to afford 6 α ,7 α -epoxy-1,4-cholestadien-3-one, which was reacted with NaBH₄ to synthesize 6 α -hydroxy-4-cholesten-3-one and reduced Li metal in absolute ethanol to form 2-ethoxy-1,4,6-cholestatrien-3-one, resp. 1,4,6-Cholestatrien-3-one was reduced with NaBH₄ in absolute ethanol to form 4,6-cholestadien-3 β -ol, which was reacted with 30% H₂O₂ to leave original compound, but was reacted with m-CPBA to give 4 β ,5 β -epoxy-6-cholesten-3 β -ol as the major product and 4 β ,5 β -epoxy-6 α ,7 α -epoxycholestan-3 β -ol as the minor product.

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(FILE 'HOME' ENTERED AT 10:59:49 ON 09 MAY 2005)

FILE 'REGISTRY' ENTERED AT 11:13:41 ON 09 MAY 2005

L1 1 S 72542-49-5
E OXYSTEROL/CN
E OXYSTEROL

L2 193 S E3

FILE 'CAPLUS' ENTERED AT 11:18:14 ON 09 MAY 2005

L3 1116 S OXYSTEROL

ACCESSION NUMBER: 1999:38935 CAPLUS
DOCUMENT NUMBER: 130:206522
TITLE: Structural requirements of ligands for the oxysterol liver X receptors LXR α and LXR β
AUTHOR(S): Janowski, Bethany A.; Grogan, Michael J.; Jones, Stacey A.; Wisely, G. Bruce; Kliewer, Steven A.; Corey, Elias J.; Mangelsdorf, David J.
CORPORATE SOURCE: Howard Hughes Medical Institute and Department of Pharmacology, University of Texas Southwestern Medical Center at Dallas, Dallas, TX, 75235-9050, USA
SOURCE: Proceedings of the National Academy of Sciences of the United States of America (1999), 96(1), 266-271
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AB LXR α and - β are nuclear receptors that regulate the metabolism of several important lipids, including cholesterol and bile acids. Previously, we have proposed that LXRs regulate these pathways through their interaction with specific, naturally occurring oxysterols, including 22(R)-hydroxycholesterol, 24(S)-hydroxycholesterol, and 24(S), 25-epoxycholesterol. Using a ligand binding assay that incorporates scintillation proximity technol. to circumvent many of the problems associated with assaying extremely hydrophobic ligands, we now demonstrate that these oxysterols bind directly to LXRs at concns. that occur in vivo. To characterize further the structural determinants required for potent LXR ligands, we synthesized and tested a series of related compds. for binding to LXRs and activation of transcription. These studies revealed that position-specific monoxidn. of the sterol side chain is requisite for LXR high-affinity binding and activation. Enhanced binding and activation can also be achieved through the use of 24-oxo ligands that act as hydrogen bond acceptors in the side chain. In addition, introduction of an oxygen on the sterol B-ring results in a ligand with LXR α -subtype selectivity. These results support the hypothesis that naturally occurring oxysterols are physiol. ligands for LXRs and show that a rational, structure-based approach can be used to design potent LXR ligands for pharmacol. use.

REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

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L9 ANSWER 14 OF 14 CAPLUS COPYRIGHT 2005 ACS on STN
ACCESSION NUMBER: 1985:557930 CAPLUS
DOCUMENT NUMBER: 103:157930
TITLE: Identification of regulatory **oxysterols, 24(S),25-epoxycholesterol** and **25-hydroxycholesterol**, in cultured fibroblasts
AUTHOR(S): Saucier, Sandra E.; Kandutsch, Andrew A.; Taylor, Frederick R.; Spencer, Thomas A.; Phirwa, Seloka; Gayen, Apurba K.
CORPORATE SOURCE: Jackson Lab., Bar Harbor, ME, 04609, USA
SOURCE: Journal of Biological Chemistry (1985), 260(27), 14571-9
CODEN: JBCHA3; ISSN: 0021-9258
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AB Biosynthetic [³H]sterols from Chinese hamster lung (Dede) cells were fractionated by HPLC, and fractions were assayed for their ability to repress 3-hydroxy-3-methylglutaryl-CoA reductase in L cell cultures. Most of the activity found was associated with 2 **oxysterols, 24(S),25-epoxycholesterol** and **25-hydroxycholesterol**. The identities of the 2 sterols were established by cochromatog. with authentic samples and by isotopic dilution and recrystn. Only low levels of repressor activity were found in other fractions of sterol extract The endogenous concns. of **24(S),25-epoxycholesterol** (7.2 fg/cell) and 25-hydroxycholesterol (1.5 fg/cell) appear to be within the ranges required for the regulation of 3-hydroxy-3-methylglutaryl-CoA reductase.

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